

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: **Fabien LANTEIRES**

Group Art Unit: **3748**

U.S. Appl. No.: **10/562,417**

Confirmation No.: **5451**

Filed: **December 23, 2005**

Examiner: **Ching Chang**

For: **METHOD FOR CONTROLLING OPERATION OF THE CYLINDER OF AN INTERNAL COMBUSTION ENGINE, AN ENGINE COMPRISING A CYLINDER OPERATING ACCORDING SAID METHOD AND A MOTOR VEHICLE PROVIDED WITH SAID ENGINE**

Attorney Docket No.: **PSA0307692**
Customer No.: **29980**

DECLARATION UNDER 37 C.F.R. §1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Fabien Lanteires, a citizen of France, hereby declare and state the following:

1. I am the named inventor of the above-identified patent application.
2. I am familiar with the application and with U.S. Patent No. 4,572,114 to Sickler et al. cited by the Examiner.
3. This declaration is submitted to explain that, as a person of the art, it is very clear to me that the process and apparatus of Sickler do not have an ignition step when the engine of Sickler operates in the double compression mode.
4. Sickler at col. 2, lines 41-45 describes an internal combustion engine that is used as an air compressor in a particular "two-stroke compressor" operating phase. From a practical standpoint, an engine in "compressor" mode should consume energy, not produce energy. Therefore, it would be contradictory if Sickler ignited an air-fuel mixture during the "two-stroke

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compressor" phase, because this would result in energy production rather than consumption, which would eliminate the advantage of at least one of the two compression phases provided by Sickler.

5. Sickler at col. 2, lines 46-50 explains that "the total retarding horsepower may approach twice the retarding horsepower of an engine equipped with a standard engine retarder." This would not be possible if Sickler maintained ignition during the second compression event. On the contrary, ignition during the second compression event would reduce the effect of the first compression event, in which case the engine of Sickler would be less effective than a conventional engine, which has no ignition but a single compression/release event per cycle in the "compressor" mode.

5. Sickler at col. 4, lines 16-17 states that "the fuel supply is shut off or reduced so that little or no fuel is injected into the engine cylinder." As a person of the art, I cannot imagine any circumstance why, in the "compressor" mode, Sickler would choose to accompany an injection of "little fuel" by ignition. A combustion step would result in "powering" the engine, which would negate the "double compressor" conversion of the engine that Sickler describes at col. 2, lines 41-44.

6. By the way, in my view, the fact that Sickler makes no mention of any ignition step during the "compressor" mode is perfectly understandable, because the absence of ignition is a natural requirement of the "two-stroke compressor" mode of Sickler. What would be difficult to understand without an explanation by Sickler would be if Sickler did provide an ignition step in the

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“compressor” mode.

7. In conclusion, as a person of the art, it is very clear to me that there is no combustion in the double-compression mode of Sickler, because technically speaking, combustion would be in complete contradiction with the purpose stated by Sickler of improving the compressor effect.

The undersigned declares that all statements made herein of his own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 18.11.2008

Signature: 

Name: Fabien Lanteires